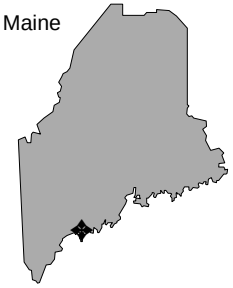
Brunswick Naval Air Station NPL

Size: 7,259 acres
Mission: Provide facilities, services, materials, and aircraft for submarine warfare
HRS Score: 43.38; placed on NPL in July 1987
IAG Status: Federal Facility Agreement signed in 1989; revised in 1990 to include the State of Maine
Contaminants: DDT, PCBs, PAHs, VOCs, and metals
Media Affected: Groundwater and soil
Funding to Date: $45.9 million
Estimated Cost to Completion (Completion Year): $17.2 million (FY2016)
Final Remedy in Place or Response Complete Date for All Sites: FY2001



Brunswick, Maine

Restoration Background

Since FY83, environmental studies have identified 19 sites at this installation. Site types include landfills, a groundwater plume contaminated with volatile organic compounds (VOCs), and two underground storage tank (UST) sites. Activities that contributed to the contamination included intermediate aircraft maintenance, material support for maintenance, aircraft fueling services, storage and disposal of ordnance, and all-weather air station operations. On-site landfills were used to dispose of wastewater treatment sludge, paints, solvents, medical supplies, pesticides, petroleum products, and photographic and industrial chemicals. The installation was placed on the National Priorities List (NPL) because Sites 1 through 4 and 7 through 9 were used for the storage or disposal of hazardous waste.

The contaminated groundwater plume associated with Sites 4, 11, and 13 (the Eastern Groundwater Plume) probably originates from a former fire training area; three USTs formerly used to store petroleum products and waste solvents; and a waste pit used to dispose of transformer oils, battery acids, caustics, VOCs, solvents, and paint thinners. The installation completed Site Inspections for 12 sites in FY85 and for 4 more between FY91 and FY95. The installation also completed Remedial Investigations and Feasibility Studies for 14 of the 17 active sites, Remedial Design (RD) for 10 sites, and a Remedial Action (RA). A Record of Decision (ROD) was signed in FY92 for an Interim Remedial Action (IRA) to address the Eastern Groundwater Plume. The IRA was completed in FY94, and operation and maintenance of the groundwater treatment plant and extraction wells began.

In FY93, many USTs were removed or replaced, and RDs began. In FY94, the installation removed USTs from the Fuel Farm UST site, completed pilot-scale tests at another site, and began full-scale operation of an air-sparging system to remediate petroleum hydrocarbon contamination in soil.

During FY95, the installation completed a Removal Action at the former pesticide shop site where DDT was detected in soil and unfiltered groundwater samples. Long-term monitoring (LTM) of groundwater is being conducted at the site. In FY96, the installation constructed landfill caps at Sites 1 and 3 and developed final RAs at five sites, three of which were designated as Response Complete. The final ROD for the Eastern Groundwater Plume treatment plant was prepared in FY97.

In FY87, the installation established an administrative record and an information repository. In FY88, the community relations plan (CRP) was completed. The technical review committee was formed in FY88 and converted to a Restoration Advisory Board (RAB) in FY95.

FY98 Restoration Progress

The final ROD for Sites 4, 11, and 13 was signed. The final ROD for Site 2 was not implemented. The Navy, regulatory agencies, and the RAB are making significant efforts to optimize the LTM system. The Navy reviewed the existing LTM plan for Sites 4, 11, and 13 and made progress in revising the plan, but delayed its completion to incorporate lessons learned from the Site 2 LTM plan. The Navy, regulatory agencies, and the RAB reviewed past data and made decisions on revising the plan. This process is expected to produce significant cost savings for LTM. The air-sparging system was expanded for UST 2 and is expected to concentrate the remediation on one stubborn area. In addition, it was determined that, at UST 1, there was a need to focus the system on a certain area. Although this had not been planned, the UST 1 air-sparging system was modified. The RDs planned for 1998 were not required because existing treatments proved effective with minor changes. The planned CRP update was found to be unnecessary. The RAB has been active and continues to provide comments on all documents before they are reviewed by regulatory agencies.

Plan of Action

- Continue RAs at Sites 4, 11, and 13 in FY99
- In FY99, complete LTM plan to halve the number of samples taken
- Utilize savings from LTM program to optimize RAs and reduce cost to complete (CTC) in FY99
- Prepare and implement LTM plan for Site 2 using lessons learned from Sites 4, 11, and 13 in FY99
- Continue RA operations at USTs 1 and 2 in FY99
- Prepare a no further action document for Sites 7, 12, 15, and 16 in FY99
- Sign a final ROD for Site 9 in FY99
- Explore ways to optimize RA operations and LTM to reduce CTC in FY99

FY99 Funding by Phase and Relative Risk